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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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In the Matter of

Communications Assistance for Law  
Enforcement Act

CC Docket No. 97-213

**COMMENTS**

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## EXECUTIVE SUMMARY

The Commission must not allow history to repeat itself by unlawfully expanding the scope of the Communications Assistance for Law Enforcement Act (“CALEA”) as it did in the *Third Report and Order*, which required carriers to implement certain “punch list” items to comply with the assistance capability requirements of Section 103 of CALEA. In order to avoid the statutory pitfalls that led the D.C. Circuit Court of Appeals to vacate and remand a portion of that order, the Commission should conclude that the J-Standard is not deficient. Adding the remaining four “punch list” items to the standard will impermissibly exceed the scope of CALEA, conflict with established electronic surveillance law, infringe upon the privacy and security of communications, and impose significant costs on carriers and ratepayers in direct violation of CALEA.

The Commission should not require the implementation of the four “punch list” capabilities for a number of reasons. First, the information provided by these features does not constitute “call-identifying information” and therefore is not required by CALEA. The plain language and legislative history of CALEA together with established electronic surveillance law convincingly demonstrate that “call-identifying information” is limited to numbers dialed or transmitted for the purpose of routing calls. Instead of adopting an overly broad definition of “call-identifying information,” the Commission should adopt the J-Standard’s definition, which is consistent with CALEA as well as established electronic surveillance law.

Second, even if the information delivered by one or more of the four “punch list” capabilities were considered “call-identifying information,” carriers would not be obligated to provide it because the information is not “reasonably available.” In addition

to limiting the definition of “call-identifying information” to telephone numbers, Congress further limited the provision of “call-identifying information” to that which is “reasonably available” to the carrier. Carriers therefore are not obligated to deliver “call-identifying information” that would require them to undertake unduly burdensome network modifications.

Third, requiring the implementation of the four “punch list” items is not “cost-effective.” CALEA mandates that the Commission adequately consider not only “cost-effective” ways to implement CALEA but also the potential effect on ratepayers. The Commission can satisfy this statutory obligation by focusing on cost-minimization, including the adoption of less costly alternatives.

BellSouth Telecommunications, Inc. (“BST”) estimates that its costs to implement all six “punch list” features will range from \$193 million to \$286 million, depending upon whether the “nationwide buy-out” is consummated with all vendors and whether carriers are allowed to install CALEA-compliant equipment and software during the normal course of business instead of meeting the September 30, 2001 compliance deadline. Therefore, requiring carriers to implement the J-Standard without adding the four “punch list” features is a “cost-effective” alternative. In order to afford proper deference to costs and minimize any negative effect on ratepayers as mandated by CALEA, the Commission should not add the four “punch list” items to the J-Standard.

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**COMMENTS**

BellSouth Corporation, by counsel and on behalf of itself and its affiliated companies (“BellSouth”),<sup>1</sup> respectfully submits these comments in response to the Commission’s public notice seeking to update the record in the above-captioned proceeding.<sup>2</sup> The Commission seeks comment on the issues identified by the United States Court of Appeals for the District of Columbia in its decision, which vacated and remanded in part the Commission’s *Third Report and Order*<sup>3</sup> establishing the technical requirements for carriers to comply with Section 103 of the Communications Assistance for Law Enforcement Act (“CALEA”).<sup>4</sup>

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<sup>1</sup> BellSouth Corporation is a publicly traded Georgia corporation that holds the stock of companies that offer local telephone service, provide advertising and publishing services, market and maintain stand-alone and fully integrated communications systems, and provide mobile communications and other network services world-wide.

<sup>2</sup> *Commission Seeks Comments To Update the Record in the CALEA Technical Capabilities Proceeding*, CC Docket No. 97-213, *Public Notice*, DA 00-2342 (rel. Oct. 17, 2000) (“*Public Notice*”).

<sup>3</sup> *Communications Assistance for Law Enforcement Act*, CC Docket No. 97-213, *Third Report and Order*, 14 FCC Rcd 16794 (1999) (“*Third Report and Order*”).

<sup>4</sup> *United States Telecom Association, et al. v. Federal Communications Commission, et al.*, 227 F.3d 450 (D.C. Cir. 2000) (“*USTA v. FCC*”).

## I. INTRODUCTION

The Commission's *Public Notice* requests comment on a number of issues including, among other things: (1) the definition of "call-identifying information;" (2) whether the four "punch list" capabilities at issue are covered by the term "call-identifying information;" (3) how cost-effectiveness should be measured; (4) the cost of implementing the four "punch list" capabilities and the effect on residential ratepayers; (5) whether there are alternative methods for providing the four capabilities; and (6) how the four "punch list" items could be implemented in order to protect privacy and security interests.<sup>5</sup>

Six years after Congress adopted CALEA and two years after the Commission sought further comment on the scope of CALEA's assistance capability requirements, the Commission, the Federal Bureau of Investigation/Department of Justice ("FBI/DOJ"), manufacturers, and carriers all find themselves back at the drawing board – still trying to define the technical requirements necessary to comply with CALEA. The task before the Commission is not now – nor has it ever been – a difficult one. The Commission's obligations under CALEA are straightforward; therefore, the Commission need only turn to the statute and its legislative history for clear direction on promulgating any rules necessary to meet the assistance capability requirements of Section 103 of CALEA.

CALEA explicitly directs the Commission to implement the statute as Congress intended – "narrowly"<sup>6</sup> and in a "cost-effective" manner.<sup>7</sup> As the Commission is well aware, CALEA was designed to balance three important objectives: (1) to preserve (not expand) the

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<sup>5</sup> *Public Notice* at 2.

<sup>6</sup> H.R. Rep. No. 103-827, 103d Cong., 2d Sess., Pt. 1 at 22-23 (1994) ("House Report").

<sup>7</sup> See 47 U.S.C. §§ 1006(b)(1), 1006(b)(3).

government's ability to conduct electronic surveillance in light of the advances in telecommunications technologies; (2) to protect the privacy of customers' communications; and (3) to avoid impeding the development of new services and technologies.<sup>8</sup> Accordingly, the Commission must refrain from adopting overly expansive requirements sought by law enforcement in order to collect the broadest array of information possible. Such an outcome is not what Congress intended, as even the FBI/DOJ have previously admitted. In hearings before Congress, the "FBI Director testified that the legislation was intended to preserve the status quo, that it was intended to provide law enforcement no more and no less access to information that it had in the past."<sup>9</sup> Accordingly, in order to satisfy its CALEA obligations, act within the scope of the law, and minimize costs to carriers and ratepayers, the Commission should not require carriers to implement the four "punch list" capabilities at issue.

In addition, the Commission must be mindful that its authority to promulgate technical rules under CALEA is significantly limited. CALEA permits the Commission to establish technical standards only if the existing standards are deficient. Moreover, any technical requirements adopted by the Commission must:

1. meet the assistance capability requirements of Section 103 by cost-effective methods;
2. protect the privacy and security of communications not authorized to be intercepted;
3. minimize the cost of such compliance on residential ratepayers;
4. serve the policy of the United States to encourage the provision of new technologies and services to the public; and

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<sup>8</sup> *Third Report and Order*, 14 FCC Rcd at 16795-16796, ¶ 2 (citing House Report at 13).

<sup>9</sup> House Report at 22.

5. provide a reasonable time and conditions for compliance with and the transition to any new standard, including defining the assistance capability requirements obligations of telecommunications carriers during any transition period.<sup>10</sup>

BellSouth urges the Commission not to repeat history by unlawfully expanding the scope of CALEA as it did in the *Third Report and Order*. As demonstrated more fully herein, mandating the implementation of the remaining four “punch list” items will impermissibly exceed the scope of CALEA, conflict with established electronic surveillance law, impose significant costs on carriers and ratepayers, and infringe upon the privacy and security of communications in violation of CALEA. Accordingly, to comply with its legislative directive, the Commission should not modify the current assistance capability requirements to include the four “punch list” capabilities.

## **II. “CALL-IDENTIFYING INFORMATION” UNDER CALEA IS LIMITED TO NUMBERS DIALED OR TRANSMITTED TO ROUTE CALLS.**

The Commission asks commenters to address the definition of the term “call-identifying information” as used in CALEA, its legislative history, and the J-standard. A review of all of these sources leads to one conclusion and one conclusion only – the term “call-identifying information” is confined to the numbers dialed or transmitted to route calls.

*CALEA*. The statute defines “call-identifying information” as “dialing or signaling information that identifies the origin, direction, destination, or termination of each communication generated or received by a subscriber by means of any equipment, facility, or service of a telecommunications carrier.”<sup>11</sup> A review of the legislative history of CALEA leaves

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<sup>10</sup> 47 U.S.C. § 1006(b) (emphasis added).

<sup>11</sup> 47 U.S.C. § 1001(2).

little doubt that Congress intended to limit the meaning of “call-identifying information” to telephone numbers. As Congress explained:

For voice communications, this [call-identifying] information is typically the electronic pulses, audio tones, or signaling messages that *identify the numbers dialed or otherwise transmitted for the purpose of routing calls* through the telecommunications carrier’s network. In pen register investigations, these pulses, tones, or messages *identify the numbers dialed* from the facility that is the subject of the court order or other lawful authorization. In trap and trace investigations, these are the incoming pulses, tones, or messages which *identify the originating number* of the facility from which the call was placed and which are captured when directed to the facility that is the subject of the court order or authorization. *Other dialing tones that may be generated by the sender that are used to signal customer premises equipment of the recipient are not to be treated as call-identifying information.*<sup>12</sup>

Thus, Congress defined the term “call-identifying information” narrowly to include only number information such as that which has traditionally been provided in response to court orders or other lawful authorizations for pen registers and trap and trace devices. Congress did not extend the definition to include other carrier network messages, tones, signals, or other information.

*J-Standard (J-STD-025)*. The J-Standard’s use of the term “call-identifying information” comports fully with the plain language of CALEA and the accompanying legislative history. It is not deficient and therefore need not be modified to include the four “punch list” items. The J-Standard limits the use of the term to telephone numbers. “Destination” is the number of the party to which a call is being made (*e.g.*, the called party). “Direction” is the number to which a call is re-directed or the number from which it came, either incoming or outgoing. “Origin” is the number of the party initiating a call (*e.g.*, calling party). “Termination” is the number of the

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<sup>12</sup> House Report at 21 (emphasis added).

party ultimately receiving a call (*e.g.*, answering party).<sup>13</sup> Although the destination, direction, and termination number will often be the same, in some instances the numbers may differ, for example, if call-forwarding is used. As a call moves through multiple switches, the number to which the call is ultimately directed may differ from the destination dialed by the party originating the call. In fact, the call may be redirected several times before it reaches its termination point.

*Pen Register and Trap and Trace Statutes.* CALEA's definition of "call-identifying information" also corresponds with the information available to law enforcement under the pen register and trap and trace provisions of the Electronic Communications Privacy Act ("ECPA").<sup>14</sup> A pen register is defined as a device that captures "electronic or other impulses which identify the *numbers dialed or otherwise transmitted*." Trap and trace devices capture "electronic or other impulses which identify the *originating number* of an instrument or device from which a wire or electronic communication was transmitted."<sup>15</sup> It is illogical to think that Congress would require carriers to provide a capability under CALEA that conflicts with established electronic surveillance law. Clearly, Congress intended to limit the term "call-identifying information" to telephone numbers, and the Commission should not unlawfully expand that definition by substituting its own judgment for that of Congress.

Thus, CALEA's requirements must necessarily be considered in the context of the statutes that authorize electronic surveillance pursuant to a court order or other lawful authorization. CALEA expressly permits law enforcement to obtain "call-identifying

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<sup>13</sup> J-Standard at 5.

<sup>14</sup> 18 U.S.C. § 3121 *et seq.*

<sup>15</sup> 18 U.S.C. §§ 3127(3)-(4) (emphasis added).

information” “only in accordance with a court order or other lawful authorization.”<sup>16</sup> In other words, CALEA does not excuse law enforcement from its duty to satisfy the evidentiary standards set forth in the pen register and trap and trace statutes. CALEA does not operate in a vacuum and must be read in conjunction with existing laws.

In sum, the plain language and legislative history of CALEA together with the existing electronic surveillance statutes leave little doubt that “call-identifying information” is limited to numbers dialed or transmitted to route calls. CALEA was enacted for the limited purpose of ensuring that new and technically advanced services that carriers offer to their customers do not impede law enforcement’s ability to conduct electronic surveillance, and for law enforcement to receive what it had received in the past: numbers dialed to and from the target’s phone (“call-identifying information”) pursuant to a court order for either a pen register or a trap and trace device, and the content of the conversation (“communications”) of the target, pursuant to a Title III court order. Law enforcement authorities under CALEA should have no more and no less access to information than they had in the past. Because the J-Standard’s use of the term “call-identifying information” is completely in line with CALEA and established electronic surveillance law, BellSouth urges the Commission to adopt that definition.

### **III. THE EXISTING INDUSTRY STANDARD IS NOT DEFICIENT AND FULLY COMPLIES WITH THE ASSISTANCE CAPABILITY REQUIREMENTS OF CALEA.**

This remand affords the Commission the opportunity to return the implementation process of CALEA to its original purposes. The evidence in this proceeding convincingly demonstrates that the core J-Standard meets the Section 103 assistance capability requirements

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<sup>16</sup> 47 U.S.C. § 1004; *see also* 47 U.S.C. § 1002(a)(1).

and should not be modified. The industry standard properly incorporates CALEA terms and concepts such as “call identifying information” and “reasonably available,” and therefore properly reflects the cost-benefit approach and the balancing of economic factors as Congress anticipated.<sup>17</sup> Accordingly, the Commission should not modify the J-Standard to include the four “punch list” capabilities at issue. These “punch list” features are beyond the scope of CALEA’s assistance capability requirements because the information provided by these capabilities does not constitute “call identifying information.”

Moreover, even if the information delivered by one or more of these capabilities were considered “call-identifying information,” carriers would not be obligated to provide it because the information sought by law enforcement is not “reasonably available.” In addition to limiting the definition of “call-identifying information” to telephone numbers, Congress further limited the provision of “call-identifying information” to that which is “reasonably available” to the carrier. The legislative history of CALEA explicitly provides that, if “call-identifying information” “is not reasonably available, the carrier does not have to modify its system to make it available.”<sup>18</sup> Thus, the Commission properly concluded that carriers are not obligated to deliver “call-identifying information” that would require them to undertake unduly burdensome network modifications.<sup>19</sup> Although CALEA clarifies a carrier’s obligation to design its network systems so as not to impede electronic surveillance, there is no requirement that a carrier provide network intelligence or signaling information that law enforcement has no statutory authority to

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<sup>17</sup> See House Report at 19 and 28.

<sup>18</sup> House Report at 22.

<sup>19</sup> The Commission concluded that “call-identifying information” is “reasonably available” “if such information is present at an IAP [Intercept Access Point] and can be made available without the carrier being unduly burdened with network modifications.” *Third Report and Order*, 14 FCC Rcd at 16809, ¶ 29.

receive. Thus, any requirement placed on a carrier to provide either: (1) features or capabilities that are not “call-identifying information” or (2) call-identifying information that is not “reasonably available” would violate CALEA.

**A. Mandating Implementation of the Four “Punch-List” Capabilities Would Exceed the Scope of CALEA, Infringe Upon Privacy Rights, Conflict with Established Surveillance Law, and Impose Significant and Unnecessary Costs on Carriers and Ratepayers.**

A proper reading of the definition of “call-identifying information” and complete consideration of the Congressional intent behind that definition demonstrates that the four additional “punch list” capabilities are in fact not required. Section 103(a)(2) of CALEA, the call-identifying provision, requires carriers to ensure that their equipment, facilities or services are capable of “expeditiously isolating and enabling the government, pursuant to a court order or other lawful authorization, to access call-identifying information that is reasonably available to the carrier.”<sup>20</sup> The language of this provision, as well as its legislative history, make it clear that this requirement mandates access to and the provision of telephone numbers only.

As the D.C. Circuit concluded, the burden is on the Commission to show that the four “punch list” capabilities not only fall under the term “call-identifying” but are also “reasonably available” and “cost-effective.”<sup>21</sup> BellSouth submits that the Commission cannot carry this burden because the law simply does not permit it. First, the four “punch list” features do not constitute “call-identifying information” as defined by CALEA and the legislative history. Second, even if the four “punch list” items were covered by the term “call-identifying information,” the information sought would not be “reasonably available” under CALEA. Third,

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<sup>20</sup> 47 U.S.C. § 1002(a)(2).

<sup>21</sup> See *USTA v. FCC*, 227 F.3d at 460-462.

unlike the J-Standard, the “punch-list” capabilities are not “cost-effective” and do not minimize the costs imposed on the industry and ratepayers as the statute requires. Accordingly, the Commission should not require carriers to implement the remaining four “punch list” capabilities in order to comply with CALEA. BellSouth addresses each of the four capabilities below.

### **1. Dialed Digit Extraction**

This capability – the single most expensive “punch list” item – would require carriers to provide law enforcement with all numbers dialed by a subject after a call has been connected. This feature would necessarily include digits such as credit card numbers, bank account numbers, passwords, or other transaction information that a customer expects will be kept private. This feature would also capture a second category of post-cut-through digits – telephone numbers dialed after the subject calls a toll-free number to reach a long-distance carrier.

The Commission correctly acknowledged that not all post-cut-through digits are “call-identifying information.”<sup>22</sup> The first category of digits described above (credit card numbers, passwords, etc.) do not constitute “call-identifying information,” because such information is unrelated to the “origin, destination, termination, or direction” of the call. Rather these digits are part of the “contents”<sup>23</sup> of the call and cannot be delivered to law enforcement under a simple pen register order.

Despite this distinction, current technology does not allow carriers to differentiate between post-cut-through digits that constitute “call identifying information” and those that

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<sup>22</sup> *Third Report and Order*, 14 FCC Rcd at 16844, ¶ 119 (“a subject may dial digits after the initial call set-up that are not call-identifying – e.g., a bank account number to access his/her bank statement . . .”).

<sup>23</sup> CALEA defines call “contents” as “any information concerning the substance, purport, or meaning of that communication.” 47 U.S.C. § 1001(1) (adopting the definitions of 18 U.S.C. § 2510).

constitute call “content.” For example, if the subject dials an 800 number, the local carrier has no way of knowing what any of the subsequent digits represent – an account number, a voicemail password, or a telephone number. Moreover, the carrier does not use any of these digits for call processing purposes.

As a result, if the Commission requires carriers to implement dialed digit extraction, all digits (including those that fall outside of the definition of “call-identifying information”) will have to be delivered – an outcome that would place carriers in the position of infringing upon customer privacy in direct violation of CALEA. Therefore, the Commission may not legally require carriers to provide law enforcement all post-cut-through digits as part of the delivery of “call-identifying information” under only a pen register order because some digits may constitute call “content.”

The Commission can avoid the statutory problems that led the court to vacate the requirement originally adopted in the *Third Report and Order* by considering at least two alternative means to obtain post-cut-through digits. Under the first alternative, law enforcement can obtain a Title III warrant and serve the originating carrier. This solution would entitle the government to access lawfully all post-cut-through digits – both call content and call-identifying information. Under the second alternative, since post-cut-through digits qualify as “call-identifying information” from the perspective of the long-distance carrier, law enforcement can serve the long-distance carrier with a lawful pen register authorization in order to obtain those digits constituting “call-identifying information.”

Although these alternatives might be less convenient or more costly for law enforcement, the legislative history of CALEA was "not intended to guarantee 'one-stop shopping' for law

enforcement.”<sup>24</sup> Moreover, CALEA prohibits law enforcement from “requir[ing] any specific design of equipment, facilities, services, features, or system configurations to be adopted” by any telecommunications carrier or manufacturer.<sup>25</sup> Requiring the government to obtain a Title III warrant for all post-cut-through digits, though potentially less convenient, certainly is more consistent with CALEA’s mandate to protect the privacy of communications than was the solution adopted in the *Third Report and Order*. Similarly, requiring law enforcement to identify the underlying long-distance carrier and serve that carrier with a pen register order will protect privacy as mandated by CALEA. The D.C. Circuit properly recognized that the burden on law enforcement is not dispositive. As the court explained,

CALEA “requires the Commission to consider more than the burden on law enforcement—after all, any privacy protections burden law enforcement to some extent. The Commission’s rules must not only meet CALEA’s ‘assistance capability requirements’ [citation omitted], but also ‘protect the privacy and security of communications not authorized to be intercepted,’ [citation omitted].”<sup>26</sup>

In addition to the legal infirmities described above, requiring carriers to provide law enforcement with the dialed digit extraction feature raises concerns regarding cost-effectiveness, network integrity, and efficiency. The solution set forth in the J-Standard, however, more than adequately addresses the needs of law enforcement, while simultaneously minimizing costs and protecting a carrier’s service capability. The J-Standard enables law enforcement to obtain “call-identifying information” – digits used to route calls – over a data channel. If, however, the government seeks access to digits that constitute both call “content” and “call-identifying

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<sup>24</sup> House Report at 22.

<sup>25</sup> 47 U.S.C. § 1002(b)(1)(A).

<sup>26</sup> *USTA v. FCC*, 227 F.3d at 462.

information,” the J-Standard permits law enforcement to order a call content (or voice) channel and receive such information pursuant to a lawful court order. Under this arrangement, the government would order a one-way call content channel and install, at its own expense, the equipment necessary to extract the post-cut-through digits.

Thus, the J-Standard is not deficient. It enables the government to accomplish its goal of obtaining access to “call-identifying information” without imposing significant costs on the industry and ratepayers. Indeed, the approach adopted in the J-Standard minimizes costs by allowing carriers to avoid the expense of developing an unnecessary digit extraction feature in the switch and keeping touch-tone registers tied to a monitored call for the duration of the call. Implementation of this “punch list” feature would be inefficient and uneconomical, because it would require the deployment of a large number of touch-tone registers in switching offices across the country for compliance with simultaneous pen register orders that would likely be idle much of the time. The J-Standard therefore is a “cost-effective” alternative by which law enforcement can obtain access to post-cut-through digits.

Implementation of the dialed digit extraction capability also raises concerns regarding network reliability. For normal call processing, touch-tone digits are detected by a touch-tone register. Since the touch-tone register is a shared resource, it is only associated with a call for a short duration when dialing occurs, and is then made available for use by another call. Requiring this shared resource to monitor a call for its entire duration (as would be needed to detect post-cut-through digits) could negatively impact the level of service for other customers in a switching office by increasing the time that it takes to apply dial tone to a line appearance. Any service degradation would violate CALEA’s requirement that carriers facilitate lawfully

authorized interceptions “unobtrusively and with a minimum of interference with any subscriber’s telecommunications service . . . .”<sup>27</sup>

In sum, the Commission should not require carriers to implement the dialed digit extraction feature as initially sought by the FBI/DOJ. This capability would violate CALEA’s privacy mandate and impose significant and unnecessary costs on carriers and ultimately on consumers. Moreover, there are less costly alternatives that do not suffer from the same legal deficiencies as dialed digit extraction. Therefore, the Commission should not require implementation of this capability.

## **2. Party Hold, Party Join, and Party Drop Messages**

The party hold/join/drop capability would require carriers to send a message to law enforcement whenever a party to a conference call is placed on hold, drops off the call, or joins the call (*e.g.*, by being taken off hold). As demonstrated above in Section II., the “call-identifying information” that Congress intended carriers to provide is limited to the telephone number indicating the call’s origination or destination or numbers used to route a call. Information such as which parties are on a call (or indications such as dial tone, lights, busy tone or ringback tone) are clearly not “numbers” and therefore do not constitute “call-identifying information.” While information leading to the identity of third parties who join or drop from a target’s call may be useful to law enforcement, it is not “call-identifying information” because it does not relate to the “origin, destination, termination, or direction” of a call and is not used for call routing purposes. Thus, the information provided by this capability is beyond the scope of CALEA and therefore not required.

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<sup>27</sup> 47 U.S.C. § 1002(a)(4).

Even if the Commission were to find that party join/drop/hold messages constitute “call-identifying information,” CALEA excuses carriers from providing these messages because the information is not “reasonably available” and therefore not required under CALEA. The Commission has already concluded that carriers are not obligated to deliver “call-identifying information” that would require them to undertake unduly burdensome network modifications.<sup>28</sup> Recording and delivering information about the status of parties on a conference call would require either: (1) upgrades to conference bridges to allow them to serve as intelligent devices capable of generating messages to law enforcement or, (2) the development and deployment of a separate message link between a conference bridge and a switch to convey status information to the switch and subsequently to law enforcement. In all but the simplest cases, conference calls are established in a remote conferencing bridge, separate from the voice switch. In other words, information about the status of parties to the conference is not readily available to the network element that normally interfaces with law enforcement. As a result, in order to implement this feature, carriers would have to undertake significant and costly network modifications.

Moreover, the existing industry standard adequately provides law enforcement with information similar to that sought under this capability. In most cases, it will be apparent to law enforcement which parties are participating on a call based on the messages already provided pursuant to the core J-Standard. Under the J-Standard, a multi-party call is identified by the phone number of each participant. An Origination message informs law enforcement that the subject has placed an outgoing call and identifies the destination telephone number. A Termination message informs law enforcement that the subject has an incoming call and identifies the calling telephone number. An Answer message identifies the number where the

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<sup>28</sup> *Third Report and Order*, 14 FCC Rcd at 16808-16809, ¶¶ 28-29.

call is answered in those cases when the termination number is not the normal destination (*e.g.*, call pickup or call forwarding). A Change message reports any changes in call identities. Thus, the J-Standard already provides law enforcement with access to the information requested under this “punch list” item. Because of the redundancy, there is no need to require carriers to implement the party/hold/drop feature.

### **3. Subject-Initiated Dialing and Signaling**

This capability would require carriers to send a message to law enforcement when the subject activates or signals his intent to use a service such as call forwarding, call waiting, or three-way calling. In other words, the calling subject presses the switchhook flash or a feature key (such as hold or transfer). Again, this capability should not be required because the information provided is not “call-identifying information” under CALEA.

As has been stated many times before, CALEA requires carriers to give law enforcement only the specific telephone numbers associated with a call. If a subscriber switches from one call to another using call waiting, there are actually two calls in progress, both of which are covered under the J-Standard. The interim standard, J-STD-025, requires carriers to deliver to law enforcement telephone numbers related to the origination or destination of a call. At issue are other stimuli on the subject’s access line that have nothing to do with the routing of a call. As discussed below, these stimuli do not constitute “call-identifying information” under CALEA and therefore are not required.

With respect to call waiting, the stimulus of pressing the switchhook flash to switch back and forth between two calls does not constitute the “termination” of the first call. With respect to call forwarding, a target’s activation of a call forwarding service through the stimulus of either pushing a feature button or dialing a feature code – actions that occur before any call has been

forwarded – does not identify the “origin, direction, destination, or termination” of a communication, because no communication has taken place. Although the activation and deactivation of call forwarding involves signaling information, such signals are not “call-identifying information” within the meaning of CALEA.

Moreover, the J-Standard as written already provides law enforcement with information similar to that sought under this capability. Under the J-Standard, carriers report the resultant status change that occurs in the call rather than the stimulus itself. For example, if (1) the subject is on an existing call, (2) subscribes to three-way calling, (3) presses the switchhook, and (4) dials a directory number, a message will report that a new call has been originated using the Origination message rather than a series of individual messages reporting each subject action. Thus, the stimulus information provided by this “punch list” item is redundant to information already provided under the J-Standard.<sup>29</sup> In addition, delivering this information could actually cause confusion under certain circumstances. For example, if the subject does not subscribe to any vertical services (*e.g.*, call forwarding, call waiting) but flashes the switchhook anyway, it may be difficult to determine what the various stimuli represent.

Even if the Commission were to conclude that the messages provided by this “punch list” item constitute “call-identifying information,” carriers should not be required to implement this feature because the information sought is not “reasonably available.” There are significant technical issues that can make this capability difficult and expensive to achieve. For example, in some switch implementations, detection and collection of off-hook and digits occur in a line

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<sup>29</sup> The information delivered by this capability is duplicative of the information provided by the party join/drop/hold capability, which, as demonstrated above, is beyond the scope of CALEA. Thus, it would not be cost-effective to adopt this capability if the Commission adopts the party join/drop/hold feature.

module that is separate and distinct from the main processor of the switch. The processor of the switch is not involved unless a valid digit pattern is collected. Making this information available to the main processor so that it can be sent to law enforcement may require fundamental modifications to switch architecture that are not only technically challenging but also costly. Thus, even if the messages under this feature could be considered “call-identifying information,” such information is not “reasonably available” and therefore is not required by CALEA.

#### **4. Notification Messages for In-band and Out-of-band Signaling**

This capability would require a carrier to notify law enforcement when there is a ringing, busy, or voice mail signal. Again, such information does not constitute “call-identifying information.” In-band/out-of-band signaling has nothing to do with the telephone numbers dialed. Nor is it used to route calls. In most cases, the in-band/out-of-band signals are not even associated with a “communication” as defined in Title III and incorporated into CALEA.<sup>30</sup> Rather, these signals are associated with call attempts that do not result in a communication. A busy signal, for example, does not identify the “termination” of a communication, since no communication has occurred. Moreover, ringing, busy, and similar signals do not provide information about the “termination” of a call because “termination” refers to the final connection necessary to complete the circuit for a communication, not to the temporal end of the call. Thus, as used in the definition of “call-identifying information,” termination refers only to the telephone number to which a calling party is connected as a result of dialing an initial sequence of digits.

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<sup>30</sup> See 18 U.S.C. § 2510(1); 47 U.S.C. § 1001(1).

Not only is the in-band/out-of-band feature not covered by the term “call-identifying information,” but it is also inefficient. The information sought is totally duplicative of other information already provided under the J-Standard. For example, the J-Standard provides for a Termination message that is delivered to law enforcement whenever a call is incoming to a subject. Included in the message is the number of the calling party, if it is available to the network. When a Termination message is received and the subject is not on the call, it is apparent that the subject’s phone is ringing and that the calling party is listening to audible ringback since this is how the telecommunications network is known to operate. Similarly, when a Termination message is received for a subject who is on a call and subscribes to call waiting, it is apparent to law enforcement that the subject is hearing a call-waiting tone. It is a known fact that these events occur, and the network-generated tones that are being applied to the subject’s or associate’s line should be obvious to law enforcement. Implementation of this “punch list” feature would require software upgrades in order to generate the messages to convey information that is duplicative of that provided under the J-Standard. Thus, there is no need to require the development of this feature.

If the Commission nonetheless finds that in-band/out-of-band signals are “call-identifying information,” it should not mandate implementation of this feature. The information sought is not “reasonably available” because of the burdensome and unnecessary network modifications that would be required. In the case where a tone or other indication is generated in a different switch from the one serving the subject, not only would the information be mainly redundant, but carriers would have to deploy an additional capability at the local switch to detect all possible tones or indications that could be returned over a connection to a remote switch. For example, if a subject calls a party on another switch or network, the subject’s local switch would

need to be able to detect busy tone, reorder tone, ringback, etc. that may be present on the connection in order to inform law enforcement of this fact. Modifications necessary to achieve this outcome would place a heavy burden on network providers, and provide practically no functionality over that which can already be inferred from a knowledge of how a normal call is processed. Thus, the interim standard J-STD-025 is sufficient as it stands thereby negating the need to add this feature to the standard.

Moreover, the developmental work and associated costs incurred to detect such tones and generate a call data channel ("CDC") message should be avoided unless such information is a requirement of pen registers and trap and trace surveillances. At a minimum, the Commission should confirm that the following are redundant messages:

- (1) A CDC message that informs the government that ringing is occurring on an incoming call when the government is already informed that a terminating call to the subject has arrived;
- (2) A CDC message that informs the government that a call-waiting tone is delivered when the government already knows that the subject subscribes to call waiting and is informed that a second call has arrived.

In sum, the Commission should not require carriers to detect and analyze in-band or out-of-band signaling that is generated somewhere else and only "passes through" a network element. First, such information is not "call-identifying information as defined by CALEA. Second, even if these signals were deemed to be "call-identifying information," they would not be "reasonably available." Provision of such information would require the widespread deployment of signal detection equipment in order to detect signals that are not normally detected at many network elements.

#### IV. COST CONSIDERATIONS MUST NECESSARILY GUIDE THE COMMISSION IN DETERMINING HOW CARRIERS MUST MEET CALEA'S ASSISTANCE CAPABILITY REQUIREMENTS.

Cost-effective compliance is mandated by CALEA. Congress explicitly directs the Commission to consider costs, cost-effective methods, and the impact on ratepayers when promulgating CALEA requirements.<sup>31</sup> Mandating implementation of the four "punch list" items will add significantly and unnecessarily to the total costs of CALEA compliance, without any countervailing benefits. The costs expected to be incurred by BellSouth Telecommunications, Inc. ("BST") to implement all six "punch list" features adopted in *Third Report and Order*<sup>32</sup> range between \$193 million and \$286<sup>33</sup> million, depending upon whether the "nationwide buy-out" has been consummated with all vendors and whether carriers are allowed to install CALEA-

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<sup>31</sup> 47 U.S.C. §§ 1006(b)(1), 1006(b)(3).

<sup>32</sup> BellSouth's costs estimates are based on general data obtained from vendors. At this time, BellSouth is unable to identify separately the costs for each individual "punch list" item because the six "punch list" capabilities are being developed as a single package. As a result, the cost data provided by vendors does not separate costs on a per "punch list" item basis. Moreover, the costs cited herein for the "punch list" items represent the costs to implement all six "punch list" features as compared to just the four that are the subject of the instant remand. Nonetheless, it is reasonable to assume that the cost for each individual "punch list" item today represents approximately the same percentage of the total costs estimated a year ago. Based on the vendors' previous revenue estimates for the "punch list" items, more than half of the revenue (and therefore more than half of the cost) was attributed to the four "punch list" items at issue here. Specifically, the four "punch list" features accounted for \$277 million (or 67 percent) of the total \$414 million in revenue expected to be derived from the original nine "punch list" items. See *Comment Sought on CALEA Revenue Estimates of Five Manufacturers*, CC Docket No. 97-213, *Public Notice*, DA 99-863, Attachment (rel. May 7, 1999). Therefore, based on the previous record, a reasonable assumption is that the four "punch list" features at issue continue to comprise a majority of the costs associated with implementing the entire six "punch list" capabilities.

<sup>33</sup> BST's cost estimates were developed using actual and projected costs for the following activities: Documentation, Method and Procedure Development; Telcordia Funding; Central Office Switch Order Preparation; Project Scheduling; Switch Generic and Switch Feature Testing; Technical Support; Switch Translations; Switch Generic Load Efforts; Switch Generic Load Costs (both software and hardware); BST and Vendor Engineering and Installation Costs; CALEA-Specific Hardware Costs; Surveillance Administration Costs; and Maintenance and Administrative Upgrades to Systems.

compliant equipment and software during regularly scheduled upgrades instead of meeting the September 30, 2001 compliance deadline.

The above-mentioned figures demonstrate several critical points. First, the costs that will be incurred to comply with CALEA on an industry-wide basis are enormous. Second, requiring carriers to implement the “punch list” items will significantly increase the overall costs of CALEA compliance. Third, the costs cited above are not fixed and are subject to change depending upon a number of factors. As shown above, if the “nationwide buyout” does not fully materialize because the FBI/DOJ cannot consummate a deal with all of the vendors, costs will increase. In addition, if the flexible deployment process – which aims to reduce costs by allowing carriers to introduce CALEA features into their switches in the normal course of business – does not go as planned or the FBI/DOJ seeks to advance or modify the sequencing of switch upgrades, costs will increase. Furthermore, if the Commission retains the September 30, 2001 compliance date for implementation of the “punch list” items, costs will rise.<sup>34</sup> In light of the foregoing, the most “cost-effective” scenario is for the Commission to refrain from loading the J-Standard with additional “punch list” capabilities.

In response to the Commission’s request for comment on ways to measure “cost-effectiveness,”<sup>35</sup> BellSouth submits that cost-minimization is a reasonable approach. As

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<sup>34</sup> In light of the uncertainty created by the court’s remand and the time necessary to consider any new evidence in this comment cycle, the Commission should suspend the September 30, 2001 compliance date for implementation of all of the “punch list” capabilities and the packet-mode capability. As BellSouth previously demonstrated, the most reasonable, efficient, and cost-effective course of action is for the Commission to establish a new compliance date after it has had an opportunity to resolve the outstanding issues that are the subject of this remand proceeding. *See* BellSouth Comments in Support of CTIA Petition to Suspend CALEA Compliance Date, CC Docket No. 97-213 (filed Sept. 15, 2000).

<sup>35</sup> *Public Notice* at 2.

demonstrated above, a number of factors can reduce costs to the industry and, in turn, minimize costs imposed on ratepayers thereby promoting “cost-effectiveness.” For example, the adoption of the J-Standard (without the addition of the four “punch list” capabilities) will reduce costs. The “nationwide buy-out” and the flexible deployment process should lower expenses. And, reasonable implementation schedules will reduce costs.

Providing access to “call-identifying” information through less expensive means is another way to assess whether a feature or capability is “cost-effective.” For example, as discussed in Section III., there are less costly and more efficient ways for law enforcement to obtain post-cut-through digits than the dialed digit extraction feature. In addition, the information to be delivered by three of the “punch list” capabilities (party hold/join/drop; subject-initiated dialing and signaling; and in-band and out-of-band signaling) is already provided under the core J-Standard capabilities. Therefore, it is unnecessary and inefficient to mandate implementation of these additional features. Just because a capability would provide law enforcement with useful information does not mean that it is required under CALEA. This time around, the Commission must give proper deference to minimizing costs, which includes adopting cost-effective alternatives, such as the J-Standard.

## **V. CONCLUSION**

For the forgoing reasons, the Commission should not add the four “punch list” capabilities to the J-Standard. The J-Standard is not deficient and provides a “cost-effective” alternative that enables law enforcement to obtain “call-identifying information” as required by CALEA. Mandating the implementation of the four “punch list” items would impermissibly

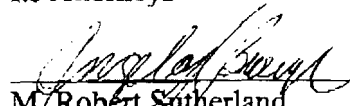
expand CALEA, infringe upon privacy rights, conflict with established electronic surveillance law, and impose significant and unnecessary costs on carriers, manufacturers, and ratepayers.

Respectfully submitted,

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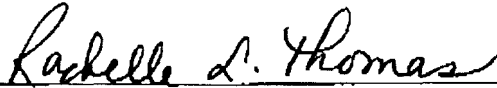
November 16, 2000

## CERTIFICATE OF SERVICE

I do hereby certify that I have this 16th day of November, 2000, served the following parties to this action with a copy of the foregoing **BELLSOUTH COMMENTS**, reference CC Docket No. 97-213, by hand delivery or by placing a true and correct copy of the same in the United States Mail, postage prepaid, as shown below.

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